

*edit authorized by Examiner

CRF Errors Corrected by the STIC Systems Branch

CRF Processing Date: 4/9/2003

Edited by: [Signature]

Verified by: [Signature] (STIC staff)

Serial Number: 09/270,4370

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: inserted an initial 'c' at location 2161 of Sequence 1

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form. 3/1/95



1600

RAW SEQUENCE LISTING

DATE: 04/09/2003

PATENT APPLICATION: US/09/270,437D

TIME: 13:16:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04092003\I270437D.raw

1 <110> APPLICANT: Chen, Yao-Tseng
 2 Gure, Ali
 3 Tsang, Solam
 4 Stockert, Elisabeth
 5 Jager, Elke
 6 Knuth, Alexander
 7 Old, Lloyd J.
 9 <120> TITLE OF INVENTION: Isolated Nucleic Acid Molecules Encoding Cancer Associated
 Antigen, The
 10 Antigens Per Se, And Uses Thereof
 12 <130> FILE REFERENCE: LUD 5538.1
 14 <140> CURRENT APPLICATION NUMBER: 09/270,437D
 C--> 16 <141> CURRENT FILING DATE: 1999-03-16
 18 <150> PRIOR APPLICATION NUMBER: 09/061,709
 20 <151> PRIOR FILING DATE: 1998-04-17
 22 <160> NUMBER OF SEQ ID NOS: 23
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 4265
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Homo sapiens
 W--> 29 <220> FEATURE:
 W--> 30 <400> SEQUENCE: 1

p.6

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34	gagggacaca	tacatcctaa	aagcaccaca	gcagaggagg	cccaggcagt	gccaggagtc	180
35	aaggttccca	gaagacaaac	cccctaggaa	gacaggcgac	ctgtgaggcc	ctagagcacc	240
36	accttaagag	aagaagagct	gtaagccggc	ctttgtcaga	gccatcatgg	gggacaagga	300
37	tatgcctact	gctgggatgc	cgagtcttct	ccagagttcc	tctgagagtc	ctcagagttg	360
38	tcctgagggg	gaggactccc	agtctcctct	ccagattccc	cagagttctc	ctgagagcga	420
39	cgacaccctg	tatcctctcc	agagtccctca	gagtcgttct	gagggggagg	actcctcgga	480
40	tcctctccag	agacctcctg	aggggaagga	ctcccagtct	cctctccaga	ttccccagag	540
41	ttctcctgag	ggcgacgaca	cccagtctcc	tctccagaat	tctcagagtt	ctcctgaggg	600
42	gaaggactcc	ctgtctcctc	tagagatttc	tcagagccct	cctgaggggtg	aggatgtcca	660
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44	gagttccctt	gagagtattc	aaagtccctt	tgagggtttt	ccccagtctg	ttctccagat	780
45	tcctgtgagc	gccgcctcct	cctccacttt	agtgagtatt	ttccagagtt	cccctgagag	840
46	tactcaaagt	cctttttgagg	gtttttccca	gtctccactc	cagattcctg	tgagccgctc	900
47	cttctcctcc	actttttgga	gtattttcca	gagttccctt	gagagaagtc	agagaacttc	960
48	ttaggggtttt	gcacagtctc	ctctccagat	tcctgtgagc	tcctcctcgt	cctccacttt	1020
49	actgagtctt	ttccagagtt	cccctgagag	aactcagagt	actttttgagg	gtttttccca	1080
50	gtctccactc	cagattcctg	tgagccgctc	cttctcctcc	actttattga	gtattttcca	1140
51	gagttccctt	gagagaactc	agagtacttt	tgagggtttt	gcccagtctc	ctctccagat	1200
52	tcctgtgagc	ccctccttct	cctccacttt	agtgagtatt	ttccagagtt	cccctgagag	1260
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58 actgagtctt ttccagagtt cccctgagag aactcacagt acttttgagg gttttcccca 1500
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63 ctctcctcc tccactttat tgagtctttt ccagagttcc cctgagtgtc ctcaaagtac 1800
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65 taccattct cctctccaga ttgttccaag tcttctcctg tgggaggact cctgtctctc 1920
66 tcaactactt cctcagagcc ctctcaggg ggaggactcc ctatctcctc actactttcc 1980
67 tcagagccct cctcagggg aggactccct gtctcctcac tactttcctc agagccctca 2040
68 gggggagagc tccctgtctc ctcaactact tctcagagc cctcctcagg gggaggactc 2100
69 catgtctcct ctcaactttc ctcaaggtcc tcttcagggg gaggaattcc agtcttctct 2160
70 ccagagccct gtgagcatct gtcctcctc cactccatcc agtcttcccc agagtttccc 2220
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77 tcctcctgag gggcctgtc agtctcctct ccagagacct gtcagctcct tcttctccta 2640
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87 gagagaagtg gacctgatg actcctatgt ctttgtaaac acattagacc tcacctctga 3240
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91 taaagtttg gtgcaggaac attacctaga gtaccgggag gtgcccact cttctcctcc 3480
92 tcgttacgaa ttctgtggg gtccaagagc tcattcagaa gtcattaaga ggaaagtagt 3540
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98 ggggtttacc tgtttactt ttgggtatgt ttcaaagtct tttcctatta ataacaggtt 3900
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103 taatgtttgc atttctcag gtcctttagt ctgtgttct tgaaaactaa agatacatat 4200
104 ctggtttgct tggcttacgt aagaaagtcg aagaaagtaa actgtaataa ataaaagtg 4260

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RAW SEQUENCE LISTING

DATE: 04/09/2003

PATENT APPLICATION: US/09/270,437D

TIME: 13:16:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04092003\I270437D.raw

105 cagtg 4265

107 <210> SEQ ID NO: 2

108 <211> LENGTH: 1142

109 <212> TYPE: PRT

110 <213> ORGANISM: Homo sapiens

113 <220> FEATURE:

W--> 114 <400> SEQUENCE: 2

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119 20 25 30

120 Ser Pro Leu Gln Ile Pro Gln Ser Pro Glu Ser Asp Asp Thr Leu
121 35 40 45

122 Tyr Pro Leu Gln Ser Pro Gln Ser Arg Ser Glu Gly Glu Asp Ser Ser
123 50 55 60

124 Asp Pro Leu Gln Arg Pro Pro Glu Gly Lys Asp Ser Gln Ser Pro Leu
125 65 70 75 80

126 Gln Ile Pro Gln Ser Ser Pro Glu Gly Asp Asp Thr Gln Ser Pro Leu
127 85 90 95

128 Gln Asn Ser Gln Ser Ser Pro Glu Gly Lys Asp Ser Leu Ser Pro Leu
129 100 105 110

130 Glu Ile Ser Gln Ser Pro Pro Glu Gly Glu Asp Val Gln Ser Pro Leu
131 115 120 125

132 Gln Asn Pro Ala Ser Ser Phe Phe Ser Ser Ala Leu Leu Ser Ile Phe
133 130 135 140

134 Gln Ser Ser Pro Glu Ser Ile Gln Ser Pro Phe Glu Gly Phe Pro Gln
135 145 150 155 160

136 Ser Val Leu Gln Ile Pro Val Ser Ala Ala Ser Ser Ser Thr Leu Val
137 165 170 175

138 Ser Ile Phe Gln Ser Ser Pro Glu Ser Thr Gln Ser Pro Phe Glu Gly
139 180 185 190

140 Phe Pro Gln Ser Pro Leu Gln Ile Pro Val Ser Arg Ser Phe Ser Ser
141 195 200 205

142 Thr Leu Leu Ser Ile Phe Gln Ser Ser Pro Glu Arg Ser Gln Arg Thr
143 210 215 220

144 Ser Glu Gly Phe Ala Gln Ser Pro Leu Gln Ile Pro Val Ser Ser Ser
145 225 230 235 240

146 Ser Ser Ser Thr Leu Leu Ser Leu Phe Gln Ser Ser Pro Glu Arg Thr
147 245 250 255

148 Gln Ser Thr Phe Glu Gly Phe Pro Gln Ser Pro Leu Gln Ile Pro Val
149 260 265 270

150 Ser Arg Ser Phe Ser Ser Thr Leu Ser Ile Phe Gln Ser Ser Pro
151 275 280 285

152 Glu Arg Thr Gln Ser Thr Phe Glu Gly Phe Ala Gln Ser Pro Leu Gln
153 290 295 300

154 Ile Pro Val Ser Pro Ser Phe Ser Ser Thr Leu Val Ser Ile Phe Gln
155 305 310 315 320

156 Ser Ser Pro Glu Arg Thr Gln Ser Thr Phe Glu Gly Phe Pro Gln Ser
157 325 330 335

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159           340           345           350
160 Leu Phe Gln Ser Ser Pro Glu Arg Thr Gln Ser Thr Phe Glu Gly Phe
161           355           360           365
162 Pro Gln Ser Pro Leu Gln Ile Pro Gly Ser Pro Ser Phe Ser Ser Thr
163           370           375           380
164 Leu Leu Ser Leu Phe Gln Ser Ser Pro Glu Arg Thr His Ser Thr Phe
165 385           390           395           400
166 Glu Gly Phe Pro Gln Ser Pro Leu Gln Ile Pro Met Thr Ser Ser Phe
169           405           410           415
170 Ser Ser Thr Leu Leu Ser Ile Leu Gln Ser Ser Pro Glu Ser Ala Gln
171           420           425           430
172 Ser Ala Phe Glu Gly Phe Pro Gln Ser Pro Leu Gln Ile Pro Val Ser
173           435           440           445
174 Ser Ser Phe Ser Tyr Thr Leu Leu Ser Leu Phe Gln Ser Ser Pro Glu
175           450           455           460
176 Arg Thr His Ser Thr Phe Glu Gly Phe Pro Gln Ser Pro Leu Gln Ile
177 465           470           475           480
178 Pro Val Ser Ser Ser Ser Ser Ser Ser Thr Leu Leu Ser Leu Phe Gln
179           485           490           495
180 Ser Ser Pro Glu Cys Thr Gln Ser Thr Phe Glu Gly Phe Pro Gln Ser
181           500           505           510
182 Pro Leu Gln Ile Pro Gln Ser Pro Pro Glu Gly Glu Asn Thr His Ser
183           515           520           525
184 Pro Leu Gln Ile Val Pro Ser Leu Pro Glu Trp Glu Asp Ser Leu Ser
185           530           535           540
186 Pro His Tyr Phe Pro Gln Ser Pro Pro Gln Gly Glu Asp Ser Leu Ser
187 545           550           555           560
188 Pro His Tyr Phe Pro Gln Ser Pro Pro Gln Gly Glu Asp Ser Leu Ser
189           565           570           575
190 Pro His Tyr Phe Pro Gln Ser Pro Gln Gly Glu Asp Ser Leu Ser Pro
191           580           585           590
192 His Tyr Phe Pro Gln Ser Pro Pro Gln Gly Glu Asp Ser Met Ser Pro
193           595           600           605
194 Leu Tyr Phe Pro Gln Ser Pro Leu Gln Gly Glu Glu Phe Gln Ser Ser
195           610           615           620
196 Leu Gln Ser Pro Val Ser Ile Cys Ser Ser Ser Thr Pro Ser Ser Leu
197 625           630           635           640
198 Pro Gln Ser Phe Pro Glu Ser Ser Gln Ser Pro Pro Glu Gly Pro Val
199           645           650           655
200 Gln Ser Pro Leu His Ser Pro Gln Ser Pro Pro Glu Gly Met His Ser
201           660           665           670
202 Gln Ser Pro Leu Gln Ser Pro Glu Ser Ala Pro Glu Gly Glu Asp Ser
203           675           680           685
204 Leu Ser Pro Leu Gln Ile Pro Gln Ser Pro Leu Glu Gly Glu Asp Ser
205           690           695           700
206 Leu Ser Ser Leu His Phe Pro Gln Ser Pro Pro Glu Trp Glu Asp Ser
207 705           710           715           720
208 Leu Ser Pro Leu His Phe Pro Gln Phe Pro Pro Gln Gly Glu Asp Phe

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RAW SEQUENCE LISTING

DATE: 04/09/2003

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TIME: 13:16:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04092003\I270437D.raw

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209          725          730          735
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213          755          760          765
214 Gly Pro Ala Gln Ser Pro Leu Gln Arg Pro Val Ser Ser Phe Phe Ser
215          770          775          780
216 Tyr Thr Leu Ala Ser Leu Leu Gln Ser Ser His Glu Ser Pro Gln Ser
217 785          790          795          800
218 Pro Pro Glu Gly Pro Ala Gln Ser Pro Leu Gln Ser Pro Val Ser Ser
219          805          810          815
220 Phe Pro Ser Ser Thr Ser Ser Ser Leu Ser Gln Ser Ser Pro Val Ser
221          820          825          830
222 Ser Phe Pro Ser Ser Thr Ser Ser Ser Leu Ser Lys Ser Ser Pro Glu
225          835          840          845
226 Ser Pro Leu Gln Ser Pro Val Ile Ser Phe Ser Ser Ser Thr Ser Leu
227          850          855          860
228 Ser Pro Phe Ser Glu Glu Ser Ser Ser Pro Val Asp Glu Tyr Thr Ser
229 865          870          875          880
230 Ser Ser Asp Thr Leu Leu Glu Ser Asp Ser Leu Thr Asp Ser Glu Ser
231          885          890          895
232 Leu Ile Glu Ser Glu Pro Leu Phe Thr Tyr Thr Leu Asp Glu Lys Val
233          900          905          910
234 Asp Glu Leu Ala Arg Phe Leu Leu Leu Lys Tyr Gln Val Lys Gln Pro
235          915          920          925
236 Ile Thr Lys Ala Glu Met Leu Thr Asn Val Ile Ser Arg Tyr Thr Gly
237          930          935          940
238 Tyr Phe Pro Val Ile Phe Arg Lys Ala Arg Glu Phe Ile Glu Ile Leu
239 945          950          955          960
240 Phe Gly Ile Ser Leu Arg Glu Val Asp Pro Asp Asp Ser Tyr Val Phe
241          965          970          975
242 Val Asn Thr Leu Asp Leu Thr Ser Glu Gly Cys Leu Ser Asp Glu Gln
243          980          985          990
244 Gly Met Ser Gln Asn Arg Leu Leu Ile Leu Ile Leu Ser Ile Ile Phe
245          995          1000          1005
246 Ile Lys Gly Thr Tyr Ala Ser Glu Glu Val Ile Trp Asp Val Leu Ser
247          1010          1015          1020
248 Gly Ile Gly Val Arg Ala Gly Arg Glu His Phe Ala Phe Gly Glu Pro
249 1025          1030          1035          1040
250 Arg Glu Leu Leu Thr Lys Val Trp Val Gln Glu His Tyr Leu Glu Tyr
251          1045          1050          1055
252 Arg Glu Val Pro Asn Ser Ser Pro Pro Arg Tyr Glu Phe Leu Trp Gly
253          1060          1065          1070
254 Pro Arg Ala His Ser Glu Val Ile Lys Arg Lys Val Val Glu Phe Leu
255          1075          1080          1085
256 Ala Met Leu Lys Asn Thr Val Pro Ile Thr Phe Pro Ser Ser Tyr Lys
257          1090          1095          1100
258 Asp Ala Leu Lys Asp Val Glu Glu Arg Ala Gln Ala Ile Ile Asp Thr
259 1105          1110          1115          1120

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/270,437D

DATE: 04/09/2003
TIME: 13:16:42

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\04092003\I270437D.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 3347,3502,3506,3520,3538,3549,3646,3940,3968,3974,4036,4056
Seq#:4; N Pos. 4062,4080,4088,4115
Seq#:5; N Pos. 1384,1464,1533,1571,1595
Seq#:6; N Pos. 3372
Seq#:7; N Pos. 1622,1702,1771,1809,1833
Seq#:8; N Pos. 3243